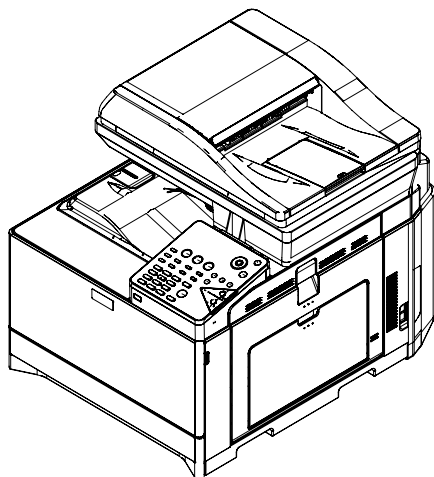# SHARP INSTALLATION MANUAL

CODE: 00ZMXC250/I3E

DIGITAL FULL COLOR MULTIFUNCTIONAL SYSTEM

MX-C250/C250E
MX-C250F/C250FE
MX-C250FR ▲3
MX-C300F/C300W
MX-C300WE/C300A ▲3
MODEL MX-C300WR ▲3

─── CONTENTS ───

Transit, Installation (using) environment, Note

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

Machine Environment, Installation, and Transportation

1.Machine Environment and Installation

Before installing the machine, check that the following conditions are satisfied.

If the installing (use) conditions are not satisfied, the machine may not exhibit full performance, resulting in problems. It may also cause safety problems. Using the following information, make sure all aspects of installation, space, power, transportation, leveling, and safety are met.

| No.	Content
1	Transportation space
2	Installing space
3	Power source (Capacity, fluctuation, safety)
4	Floor strength
5	Direct rays of the sun, dust, temperature, humidity, gases, chemicals

A.Transportation space

For installation of a large size machine, be sure to check that the door size is wide enough before bringing in.

B.Installing space

The following space must be provided around the machine in order to assure machine performance and proper operations.

If any option is installed, provide the additional space for with installation.

Adequate space must be provide behind the machine for proper ventilation of heat and dust. The machine will not function properly if heat and dust cannot be properly expelled from the machine.

11-13/16"
(30cm)

11-13/16"
(30cm)

17-23/32"
(45cm)
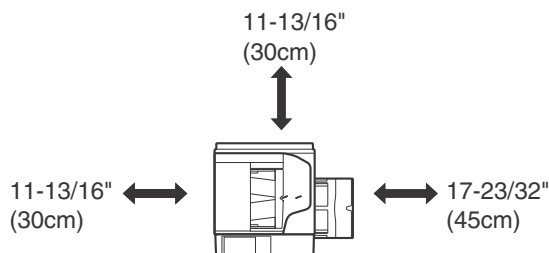
C.Power source (Capacity, voltage, frequency, safety, plug)

If the power specifications are not satisfied, the machine cannot exhibit full with performance and may cause safety trouble.

Strictly observe the following specifications.

(1)Power capacity

Check that the following power capacity is satisfied. If not, additionally provide a proper power source.

Current capacity

Japan: 20A or more

EX 100V: 15A or more

EX 200V: 10A or more

Important

Check the shape of the power plug of the machine, and insert it into a power outlet of the acceptable shape.

(2)Power voltage

Measure the voltage during copying to check that the voltage is in the range of the specified voltage +/- 10%.

If the voltage is outside the specified range, please have a certified electrician upgrade the outlet.

(Electrical work is required.)

Use of a step-up transformer is also available. In this case, the capacity must be great enough for the max. power consumption of the machine.

(3)Power frequency, waveform

The frequency must be within the range of the specified frequency +/- 2%. If the power waveform is improper, a problem may occur with the machine.

(4)Safety

Be sure to properly ground the machine.

Grounding (earth connection) must be performed before inserting the power plug into the power outlet.

When disconnecting the earth connection, be sure to disconnect the power plug from the power outlet in advance.

(5)Power plug

Check the shape of the power plug of the machine, and insert it into a power outlet of the acceptable shape.
Power plug stated in power capacity.

D.Floor strength and level

This machine is considerably heavy and becomes heavier with an option installed.

The floor must be strong enough to safely support the weight of the machine as well as any installed options.

If the unit is not properly leveled, toner density may become affected degrading the copy / print quality.

Also, color shift or image distortion may occur.
To assure proper Image quality, make sure the machine is sitting level.

E.Direct rays of the sun, dust, temperature, humidity, gasses, chemicals, vibration

#### (1)Temperature and humidity (Environmental conditions)

This machine is designed to perform properly under the specified temperature and humidity. If the temperature and humidity exceeds the specified range, the machine may not operate properly and or cause equipment failure.

Especially when the humidity is too high, paper absorbs humidity to cause a paper jam or dirty copy.

Do not install the machine near a heater, an air conditioning outlet, or a humidifier.
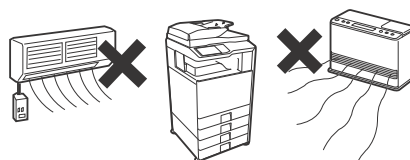
Condensation may form inside the machine causing multiple problems. Make sure machine has proper ventilation.

Humidity（RH）

85%
60%

20%

10℃   30℃ 35℃
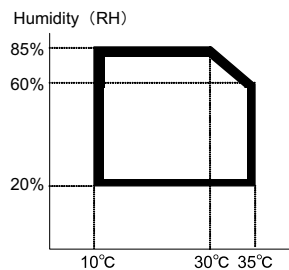
Operational environment

Temperature: 10 to 35 degree C

Humidity: 20 to 85% RH

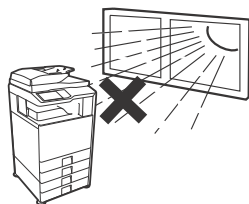Atmospheric pressure: 590 to 1013hPa (altitude: 0 to 2000 m)

(2)Contaminates

If dust enters the machine, it may cause dirty copy and a paper jam, resulting in a shortened lifetime.

(3)Direct sunlight

If the machine is installed in direct sunlight, the exterior of the machine may be discolored and abnormal copies may be produced.

(4)Gases and chemicals

Do not install the machine at a place where there are gases and chemicals. Especially be careful to avoid installation near a diazo-type copier, which produces ammonium gas.
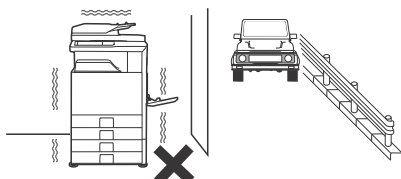
Copy quality may be adversely affected and machine problems may arise.

(5)Vibration

Avoid installation near a machine which produces vibrations.

If vibrations are applied to the copier machine, copy images may be deflected and a trouble may be caused.


F.Note for handling PWB and electronic parts

When handling the PWB and the electronic parts, be sure to observe the following precautions in order to prevent against damage by static electricity.

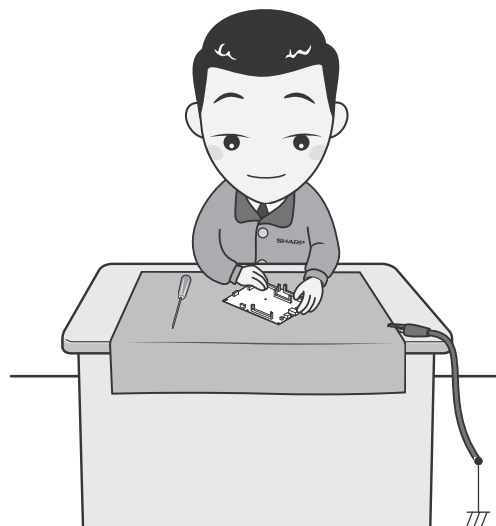- When in transit or storing, put the parts in an anti-static bag or an anti-static case and do not touch them with bare hands.
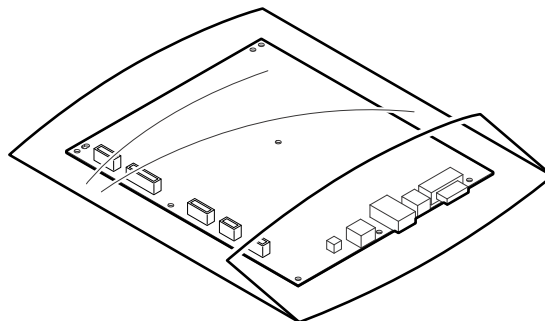
- When and after removing the parts from an anti-static bag (case), use an earth band as shown below:

    - Put an earth band to your arm, and connect it to the machine.
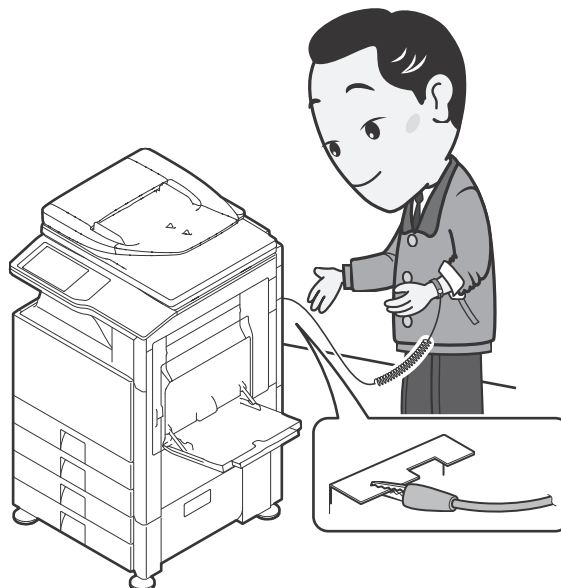
- When repairing or replacing an electronic part, perform the procedure on an anti-static mat.

G. Note for proper drum, developing, fusing and transfer unit handling

When handling the OPC drum, developing, fusing units and transfer units, observe the following items.

Drum unit

- To prevent damage to the OPC drum, avoid working on the drum unit in high intensity light areas.
- When the OPC drum is removed from the machine, cover it with light blocking material. (When using paper, use about 10 sheets of paper to cover it.)
- Be careful not to attach fingerprints, oil, grease, or other foreign material on the OPC drum surface.

Transfer unit

- Be careful not to "leave" fingerprints, oil, grease, or other foreign material on the transfer roller, primary transfer belt and secondary transfer roller.

Developing unit

- Be careful not to "leave" fingerprints, oil, grease, or other foreign material on the developing unit.

Fusing unit

- Be careful not to "leave" fingerprints, oil, grease, or other foreign material on the fusing roller.
- If the machine is not going to be used for an extended period, release the pressure on the fusing rollers.

If these items are neglected, a trouble may be generated in the copy and print image quality.

2. Transit and delivery

No.	Content	Method
1	Implements, facility, and man power	Use a forklift. (If no forklift is available, manpower of two persons is required.)
2	Delivery	Transit must be made in packed condition.

A. Implements, facility, and manpower

It is recommended to use a forklift when moving the machine.

If no forklift is available, man-power of two persons is required. The machine is considerably heavy, and requires safety precautions for delivery and installation.
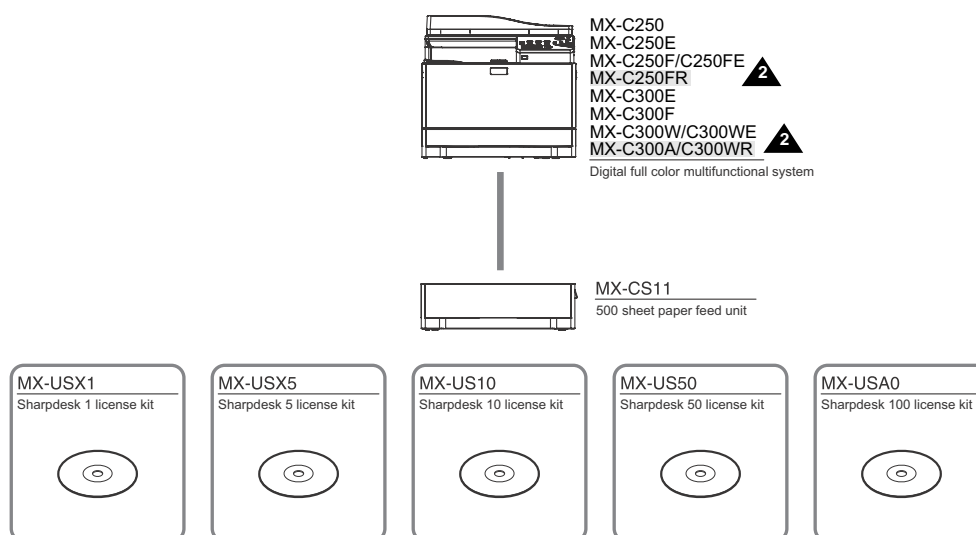
Transit of the machine must be made in packed condition to the installing place.

B. Delivery

Remove the packing materials prior to installation in the office environment.

[1] CONFIGURATION

1. System configuration

MX-C250
MX-C250E
MX-C250F/C250FE ⚠2
MX-C250FR
MX-C300E
MX-C300F
MX-C300W/C300WE ⚠2
MX-C300A/C300WR ⚠2
Digital full color multifunctional system

MX-CS11
500 sheet paper feed unit

MX-USX1 — Sharpdesk 1 license kit
MX-USX5 — Sharpdesk 5 license kit
MX-US10 — Sharpdesk 10 license kit
MX-US50 — Sharpdesk 50 license kit
MX-USA0 — Sharpdesk 100 license kit

2. Product list

A.North America

Product Name	cpm*	Panel	HDD	NIC	Wireless LAN	Copy	Print			NW Scan	Fax	iFAX	DF	OSA
							SAPL	PCL	PS					
MX-C250	25cpm	Mono CD	No	STD	No	STD	No	STD	STD	STD	No	No	STD SPF	No
MX-C300W	30cpm	Mono CD	No	STD	STD	STD	No	STD	STD	STD	STD	No	STD RSPF	No

B.Europe

Product Name	cpm*	Panel	HDD	NIC	Wireless LAN	Copy	Print			NW Scan	Fax	iFAX	DF	OSA
							SAPL	PCL	PS					
MX-C250E	25cpm	Mono CD	No	STD	No	STD	No	STD	STD	STD	No	No	STD SPF	No
MX-C250F / MX-C250FE / MX-C250FR	25cpm	Mono CD	No	STD	No	STD	No	STD	STD	STD	STD	No	STD SPF	No
MX-C300E	30cpm	Mono CD	No	STD	No	STD	No	STD	STD	STD	No	No	STD RSPF	No
MX-C300W / MX-C300WE/ MX-C300WR	30cpm	Mono CD	No	STD	STD	STD	No	STD	STD	STD	STD	No	STD RSPF	No

C.Other

Product Name	cpm*	Panel	HDD	NIC	Wireless LAN	Copy	Print			NW Scan	Fax	iFAX	DF	OSA
							SAPL	PCL	PS					
MX-C250	25cpm	Mono CD	No	STD	No	STD	No	STD	STD	STD	No	No	STD SPF	No
MX-C250F	25cpm	Mono CD	No	STD	No	STD	No	STD	STD	STD	STD	No	STD SPF	No
MX-C300F	30cpm	Mono CD	No	STD	No	STD	No	STD	STD	STD	STD	No	STD RSPF	No
MX-C300W	30cpm	Mono CD	No	STD	STD	STD	No	STD	STD	STD	STD	No	STD RSPF	No
MX-C300A	30cpm	Mono CD	No	STD	STD	STD	No	STD	STD	STD	No	No	STD RSPF	No

*The same speed in both Color/Monochrome. The same speed in both A4/LTR.

3. Option list

Model	Name	Model name	MX-C250, MXC250E, MX-C250F, MX-C250FE, MX-C300E, MX-C300F, MX-C300W, MX-C300W, MX-C300A	MX-C250FR, MX-C300WR
Feeding equipment	500-SHEET Paper Feed Unit	MX-CS11	OPT	OPT
Application	Sharpdesk 1 License Kit	MX-USX1	OPT	-
	Sharpdesk 5 License Kit	MX-USX5	OPT	-
	Sharpdesk 10 License Kit	MX-US10	OPT	-
	Sharpdesk 50 License Kit	MX-US50	OPT	-
	Sharpdesk 100 License Kit	MX-USA0	OPT	-

STD: Standard provision,   OPT: Option,   - : No setting

⚠3 [2] MX-C250/C250E/C250F/C250FE/C250FR/C300E/C300F/C300W/C300WE/ C300A/C300WR(MAIN UNIT)

1.Unpacking

A.Unpacking procedure

1) Open the top of the carton box.

2) Remove the parts included in the package.

3) Remove the main unit from the package, and remove the polyethylene bag. Place the machine on a solid, sturdy surface.
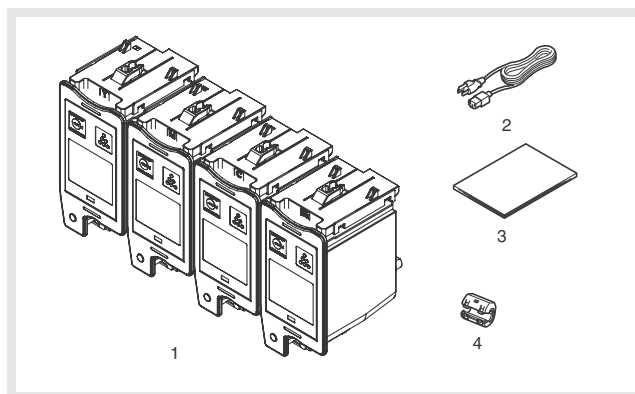

B.Removal of the fixing tape and protection material

⚠1

Only for North Ameria

Warning sheet

* With only for north America model, remove the warning sheet. ⚠1

C.Check the packed items

1) Check that all the parts are in the package.

⚠2

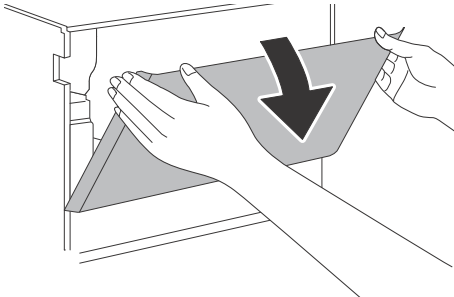| No.	Packed part names	Quantity
1	Toner cartridge	1 piece for each color (Other than North America)
2	AC cord	200V series only: 1 piece 120V (USA)
3	Operation Manual	1 set
4	Ferrite core	1

[2] Installation

1. Remove the cap of developing unit

1) Remove the tray.
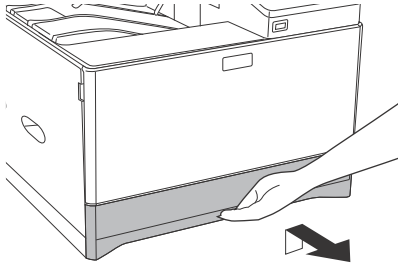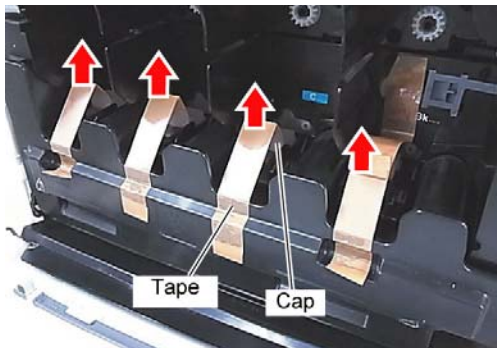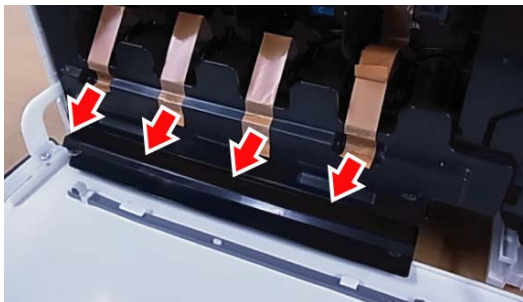

2) Open the front cover.

3) Remove the silica gel material.

4) Remove fixing tapes and the caps on the developing units.

NOTE: Be sure to keep the caps. Caps are used when the machine is transferred to the different location.

2. Installation of toner cartridges
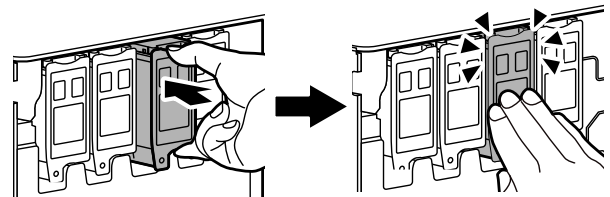
* The life of each toner cartridge is as follows:

   Black toner cartridge: equivalent to approximately 1K (A4/LT 5%)

   Color toner cartridge: equivalent to approximately 1K (A4/LT 5%)

1) Shake the toner cartridge (included in package) vertically several times.
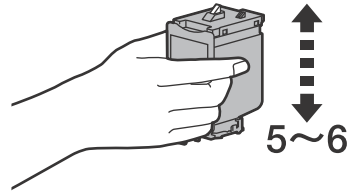
2) Insert the toner cartridge horizontally and straight until it locks.

NOTE: Be sure to install the color cartridges to their proper positions. Avoid installation to a different color position.

NOTE: Do not forcibly insert the toner cartridge. Keep holding the cartridge and completely insert it.

NOTE: When the machine is transported with the developing unit removed, be sure to remove the toner cartridge. (if not toner may become clogged.)
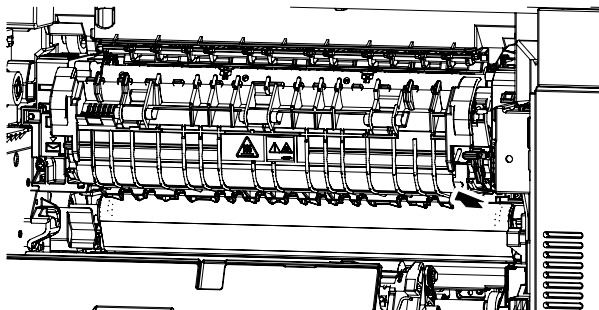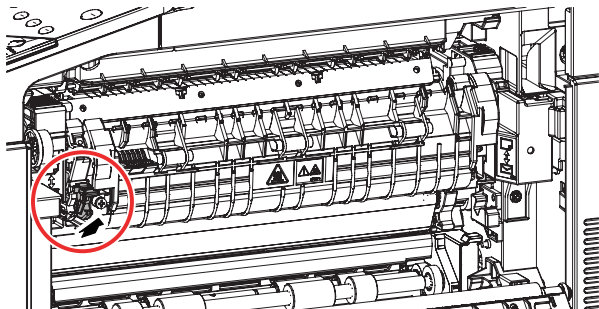
NOTE: Do not remove or insert the toner cartridge with the developer cartridge removed.

NOTE: Press the center of the cartridge until it is locked when installing the cartridge.
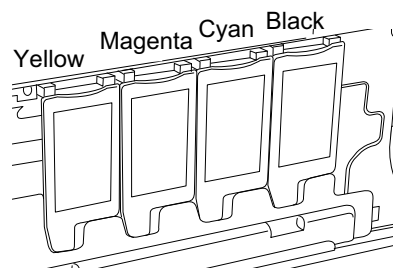
C. Fusing unit lever

1) Open the right door unit..

2) Turn the levers of the Fusing unit to add the pressure.

NOTE: When the machine is left for one month without using, the Fusing heat roller could be deformed. If the machine is not going to be used for an extended period, release the pressure on the fusing rollers.
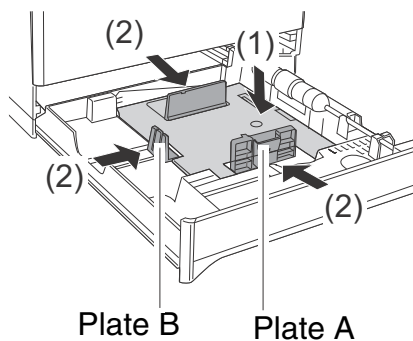
4. Tray size setup

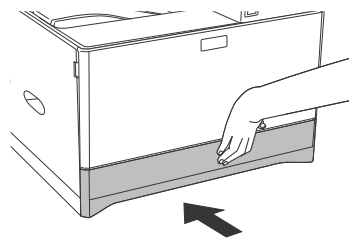1) Gently pull out the tray until it stops. If paper is in the tray, remove it.
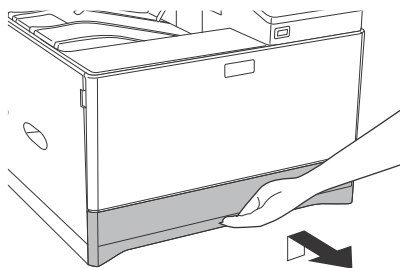
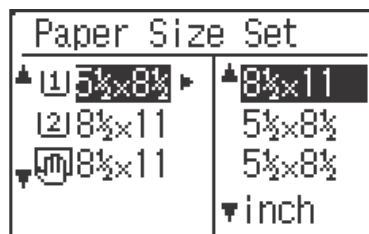2) Adjust the guide plates A and B to the vertical size and the horizontal size of paper.

   The guide plates A and B are movable. Hold the fixing knob to slide the guide plates A and B to match the paper size.

Plate B   Plate A

3) Insert the tray slowly.

1

4) Turn ON the machine and press the [SPECIAL FUNCTION] key on the LCD, and press the [UP] or [DOWN] key to select "Paper Size Set".

5. Line cable connection (Only for the machine with FAX)

1) Connect the line cable on the line to the modular jack indicated as "LINE."
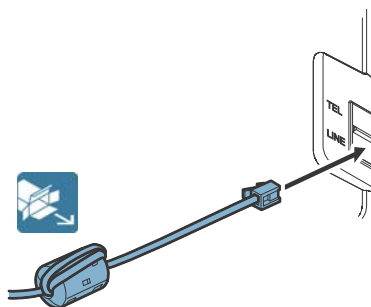
Note

It is necessary to prepare the line cable by yourself. The line cable is not installed into the machine.

Note

When connecting the line cable (to LINE or TEL), wind the line cable two turns or one turn around the included ferrite core as shown in the figure, and connect to the modular jack which is marked with "LINE."

6. Specifications setting

Use SIM26 to set to the specifications according to the customer's request.

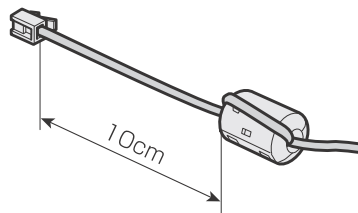| SIM No		Content
26	6	Destination setting

To customize one of the following items after destination setting, change the set value of the item.

| SIM No		Content
26	18	Toner save mode enable/disable setting
		* For the other destinations, this setting is made by the user program.
	53	Auto color calibration enable/disable setting

7. Key sheet replacement (Only for north America)

1) Prepare the following Key sheets depending on the installed models.
   Machine with FAX : HPNLC0082QSZZ KEY SHEET
   Machine without FAX : HPNLC0082QSZ1 KEY SHEET 3IN1

2) Remove the protector paper for the Key sheet.

3) Peel off the release paper in 5 to 6 mm from the edge on the rear side of the Key sheet.
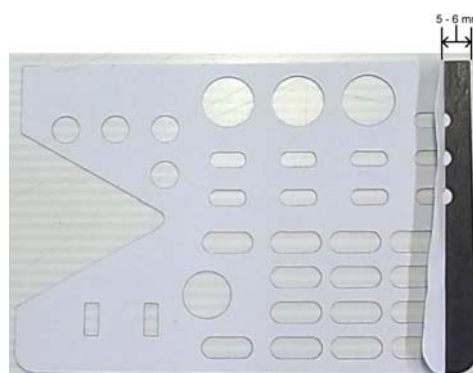
4) Put the Key sheet by attaching the peeled part on the rear side of the Key sheet to the Operation panel.
   At this moment, fit the STOP key, FAX key (only for FAX model) and COPY key with the Key sheet. (For the machine with FAX)
   Or, fit the STOP key, SCANNER key and COPY key with the Key sheet. (For the machine without FAX)

Note : Do not make the buttons overlapped by the Key sheet when putting the key sheet.   The Key sheet could be banked by the buttons.
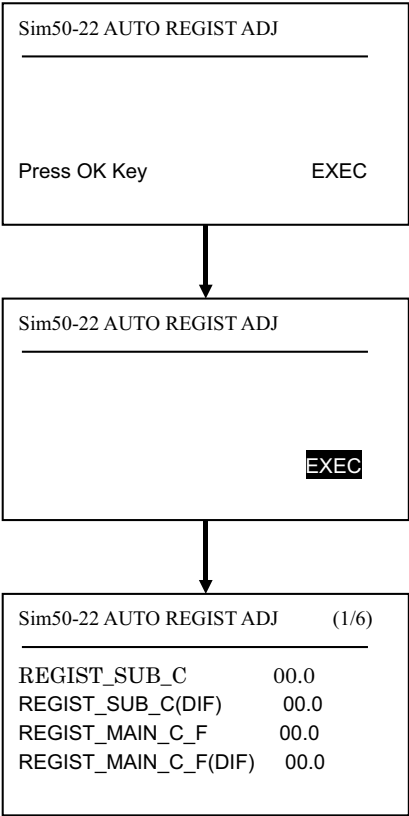
3. Image quality check

A. Execution items

Execute the checking items about the printing quality. Regarding the specific procedures for the printing quality, refer to the Service Manual [5] ADJUSTMENT.

B. Description

1. Print engine image distortion confirmation and adjustment

This adjustment performs the print engine image distortion adjustment, the OPC drum phase adjustment, and the color registration adjustment simultaneously.

1) Enter SIM50-22 mode and perform the auto registration adjustment.

```
Sim50-22 AUTO REGIST ADJ
─────────────        ─────────


Press OK Key              EXEC
```

↓

```
Sim50-22 AUTO REGIST ADJ
─────               ─────────




                       EXEC
```

↓

```
Sim50-22 AUTO REGIST ADJ        (1/6)
─────────────────        ─────

REGIST_SUB_C            00.0
REGIST_SUB_C(DIF)       00.0
REGIST_MAIN_C_F         00.0
REGIST_MAIN_C_F(DIF)    00.0
```

2) When the adjustment is completed, [EXECUTE] key returns to the normal display, and the value of the adjustment result is displayed.

The current skew level for each color is displayed on the SKEW display section.

```
Sim50-22 AUTO REGIST ADJ      (1/7)
──────────────          ─────

SKEW_K                  00.0
SKEW_C                  00.0
SKEW_C(DIF)             00.0
SKEW_M                  00.0
```

```
Sim50-22 AUTO REGIST ADJ      (7/7)
──────────────          ─────

REGIST_MAIN_Y_R(DIF)    00.0
PHASE                   00.0
PHASE  before           00.0
```

3) Make a copy of the servicing color test chart (UKOG-0326FCZZ/UKOG-0326FC11), and check that they are proper. If the test results are not proper, refer to [5] ADJUSTMENT of the Service Manual and perform the adjustments.

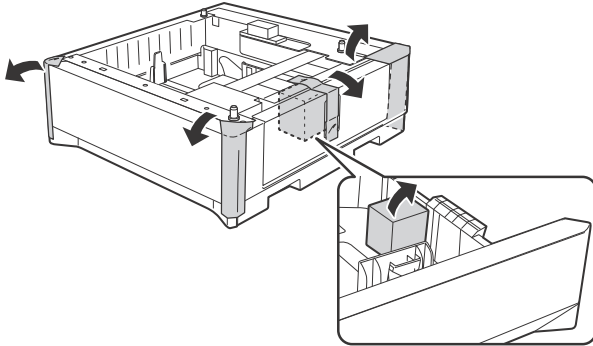# [3] MX-CS11 (500 SHEET PAPER FEED UNIT)

1. Unpacking

A. Removal of the 500 sheet paper feed unit

A	x2	
B	x2	
C	x1	XEBS740P10000
D	x3	XHBS740P08000
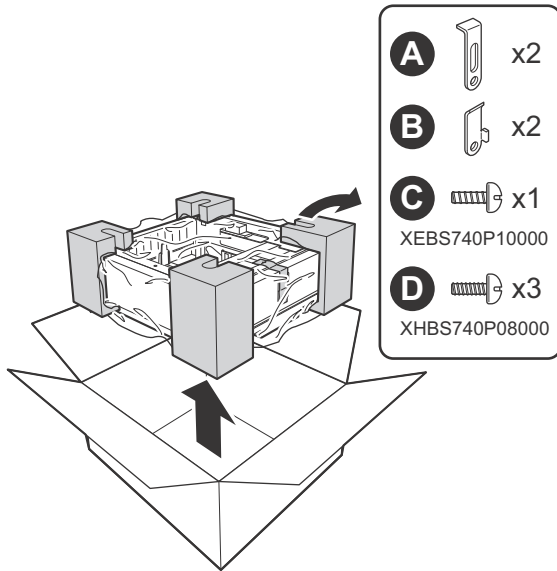
B. Removal of the fixing tape and protection material

1) Remove the 500 sheet paper feed unit from the polyethylene bag, and remove the fixing tape and the protection material.

C. Packed items check

No.	Name	Quantity
1	Plate A	1
2	Plate B	1
3	Fixing screws (M4 x 10 P Tight)	1
4	Fixing screws (M4 x 8 S Tight)	3

2.Installation

<Precautions for installation>

Before execution of installation, check to confirm that the data lamp under it are not lighted or blinking.

A.Turn off the power of the main unit

1) Check to confirm that the operation panel is turned OFF, and then turn OFF the power switch.

2) Disconnect the power plug from the power outlet.

B.Install the main unit to the MX-CS11.

NOTE: If the main unit is combined with the MX-CS11, it must be used as a desktop machine and must not be used on the floor in order to prevent against falling.
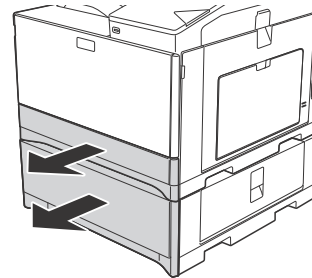
1) Put the main unit on the MX-CS11 so that they fit together.

NOTE: When holding the main unit, use two persons.
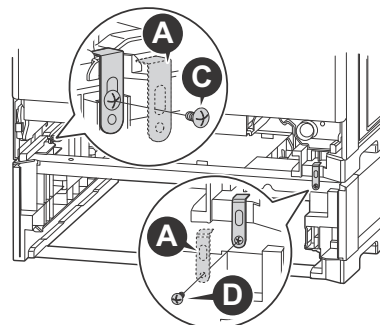
NOTE: When lifting / holding the main engine, never lift / hold the engine by the scanner unit. Lift the engine at the right and left cover bottoms using the hand grab indentions provided.
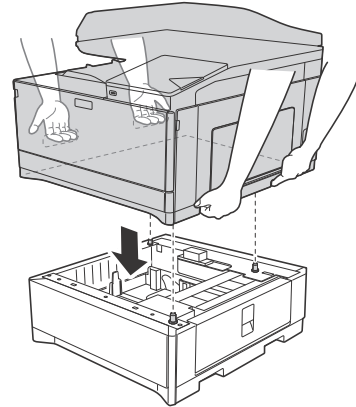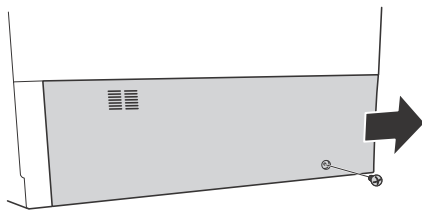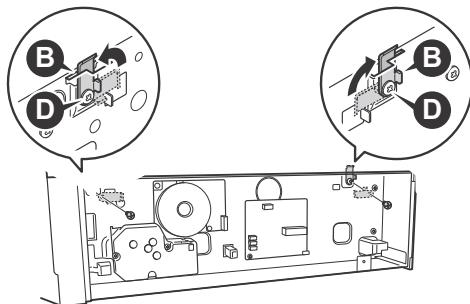

2) Pull out the trays of the main unit and MX-CS11.

3) Attach the main unit and MX-CS11 with the plates (Packed item Plate A) and the screws (Packed items M4x10 P Tight and M4x8 S Tight).

4) Remove the Rear cover. .

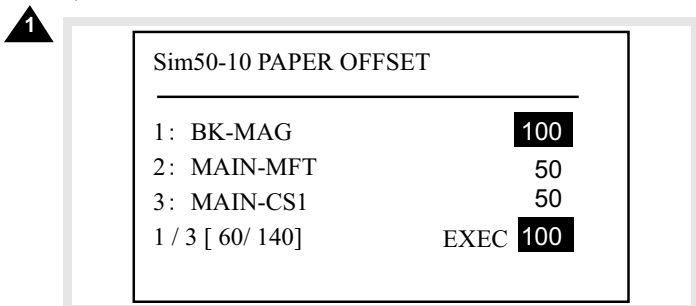5) Attach the main unit and MX-CS11 with the plates (Packed item Plate B) and the screws (Packed items M4x10 P Tight).

C.Turn on the power of the main unit

1) Power to the main unit.
2) Turn ON the power switch.

3. Adjustments

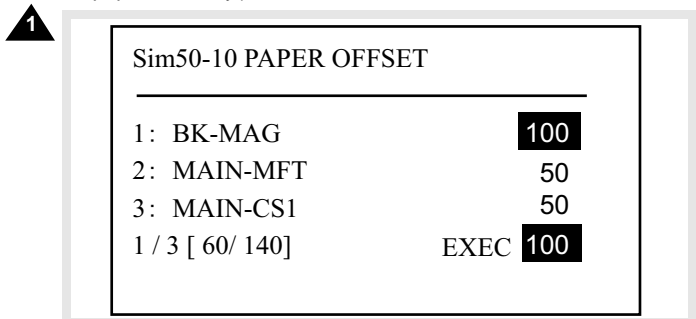### A.Image off-center automatic adjustment (Document table mode)

1) Enter the SIM50-10 mode.

⚠️1

```
Sim50-10 PAPER OFFSET
─────────────────────────────
1: BK-MAG            100
2: MAIN-MFT           50
3: MAIN-CS1           50
1 / 3 [ 60/ 140]     EXEC 100
```

2) Set A4 (11" x 8.5") paper in each paper feed tray.

3) Press [START] key.

The adjustment pattern is printed out. (Paper is fed from the paper feed tray.)

⚠️1

```
Sim50-10 PAPER OFFSET
─────────────────────────────
1: BK-MAG            100
2: MAIN-MFT           50
3: MAIN-CS1           50
1 / 3 [ 60/ 140]     EXEC 100
```

Perform the procedures of 2) - 3) for the printed adjustment pattern of each paper feed tray.
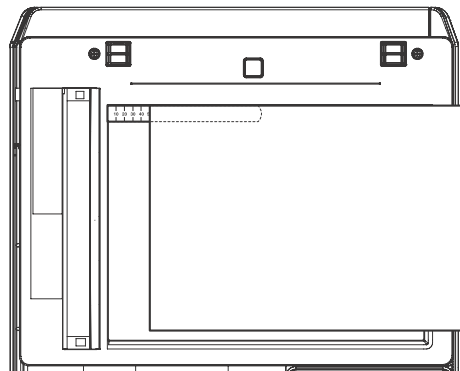
4) Press [OK] key.

The adjustment result becomes valid.

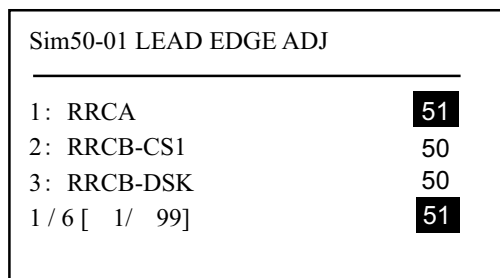### B.Copy image position, image loss, and void area adjustment (Manual adjustment)

1) Place a scale on the document table as shown in the figure below.

Place a scale so that it is in parallel with the scanning direction and that its lead edge is in contact with the document guide plate.

Place white paper on the document table so that the scale lead edge can be seen.

2) Enter the SIM 50-1 mode.

```
Sim50-01 LEAD EDGE ADJ
─────────────────────────────
1: RRCA              50
2: RRCB-CS1          50
3: RRCB-DSK          50
1 / 6 [  1/  99]     50
```

⬇

```
Sim50-01 LEAD EDGE ADJ
─────────────────────────────
1: RRCA              51
2: RRCB-CS1          50
3: RRCB-DSK          50
1 / 6 [  1/  99]     51
```
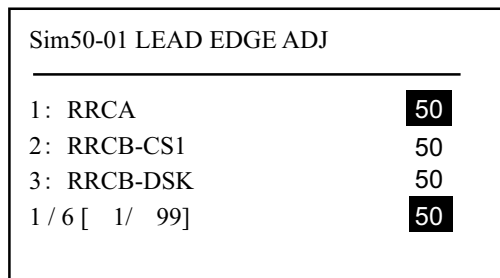
3) Set RRCA, LEAD, and SIDE to the default values.

⚠️1

Item/Display			Content		Setting range	Default value
1	Lead edge adjustment value	RRCA	Document lead edge reference position (OC)		0 - 99	50
2		RRCB-CS1	Registration motor ON timing adjustment	Standard Tray	1 - 99	40
3		RRCB-DSK		Desk	1 - 99	50
4		RRCB-MFT		Manual paper feed	1 - 99	50
5		RRCB-ADU		ADU	1 - 99	50

	Item/Display		Content	Set-ting range	Defau lt value
6	Image loss area setting value	LEAD	Lead edge image loss area setting	0 - 99	30
7		SIDE	Side image loss area adjustment	0 - 99	20
8	Void area adjust-ment	DENA	Lead edge void area adjustment	1 - 99	40
9		DENB	Rear edge void area adjustment	1 - 99	35
10		FRONT/ REAR	FRONT/REAR void area adjust-ment	1 - 99	35
11	Off-cen-ter adjust-ment	OFFSET_ OC	OC document off-center adjust-ment	1 - 99	50
12	Magnifi-cation ratio correc-tion	SCAN_ SPEED_O C	SCAN sub scan-ning magnifica-tion ratio adjustment (CCD)	1 - 99	50
13	Sub scan-ning direc-tion print area correc-tion value	DENB-MFT	Manual feed cor-rection value	1 - 99	50
14		DENB-CS1	Tray 1 correction value	1 - 99	50
15		DENB-CS2	Tray 2 correction value	1 - 99	50
16	Sub scan-ning direc-tion print area correc-tion value	DENB-ADU	ADU correction value	1 - 99	50

4) Perform the image lead edge reference position adjustment.

Shift to the copy mode, and make a copy at each of 100% and 200% in the document table mode.

When the adjustment value of RRCA is proper, the lead edge image from 4.0mm is not copied in either of 100% and 200% copy scale.

If not, change and adjust the RRCA value.

(Adjust so that the lead edge image from 4.0mm is not copied in either of different copy magnification ratios.)
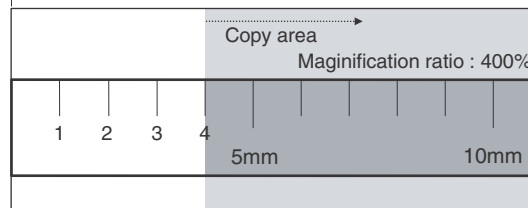
Repeat the above procedures until a satisfactory result is obtained.
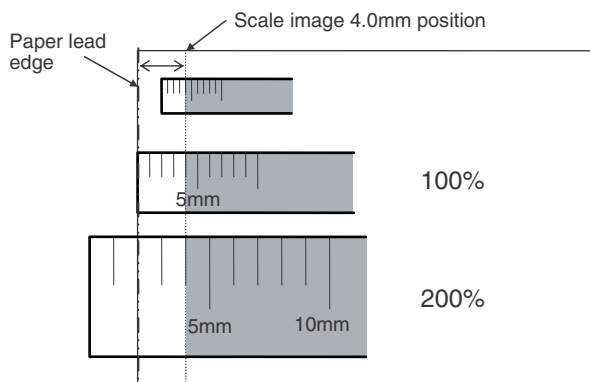
5) Image loss adjustment

When the adjustment item of the image loss below is set to the default value, it is adjusted to the standard state. If it is not in the below standard state, or when it is set to a desired value, change these adjustment items.

Void area: 4.0mm, Image loss: 4.0mm

Item/ Dis-play	Content		Adjust-ment range	De-fault valu e	Standard adjust-ment value
LEAD	Image loss adjust-ment	Lead edge image loss adjust-ment	0 - 99	40	4.0 +/- 1.0mm
SIDE		Side image loss adjust-ment	0 - 99	20	2.0 +/- 1.0mm

When the adjustment value is increased, the image loss is increased. When the adjustment value is decreased, the image loss is decreased.

When the adjustment value is changed by 1, the void area is changed by 0.1mm.

[4] Setting, Adjustments, Operation check

1. Firmware version check and version up

After installation of all the options to the machine, use SIM49-1 to check the version of each firmware. If it is not the latest version, upgrade it to the latest one.

2. Function and operation check

Check that the following operations are normal.

Check item list		Equipped condition
Key-in (operation panel)		
Display (operation panel)		
Paper feed operation	Hand feed	
	Main unit paper tray	
	Desk unit paper feed tray	With the desk unit installed
Paper size detection		
Originals size detection	Original table mode	
	RSPF mode	
RSPF operation / two sided copy	S-S mode	
	D-S mode	
	S-D mode	
	D-D mode	
Paper exit operation		

[5] Setup and adjustment data recording

Print the various setup data and the adjustment data (list) with SIM22-6 and keep the data.

- In case of a memory trouble, if the data is not kept, all the adjustments must be made again.
- If the data is kept, the setup values and the adjustment values can be entered without adjustments, shortening the servicing time.

[6] Necessary works before moving the machine

1) If the following options are installed, remove all of them from the machine.
   - Paper pass unit
2) Remove the following consumable parts from the machine.
   - Paper
   - Toner cartridges
   - Development cartridge
3) Lock the following sections.
   - Scanner (Optical section)
   - Paper cassette lift plate

Important

Since the hard disk drive is built in the machine, use care not to exert vibrations or shocks to the machine when in transit.

LEAD-FREE SOLDER

The PWB's of this model employs lead-free solder. The "LF" marks indicated on the PWB's and the Service Manual mean "Lead-Free" solder. The alphabet following the LF mark shows the kind of lead-free solder.

Example:

Lead-Free

Solder composition code (Refer to the table at the right.)

5mm

LF a

<Solder composition code of lead-free solder>
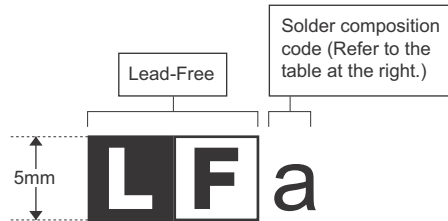
Solder composition	Solder composition code
Sn-Ag-Cu	a
Sn-Ag-Bi Sn-Ag-Bi-Cu	b
Sn-Zn-Bi	z
Sn-In-Ag-Bi	i
Sn-Cu-Ni	n
Sn-Ag-Sb	s
Bi-Sn-Ag-P Bi-Sn-Ag	p

(1) NOTE FOR THE USE OF LEAD-FREE SOLDER THREAD

When repairing a lead-free solder PWB, use lead-free solder thread.

Never use conventional lead solder thread, which may cause a breakdown or an accident.

Since the melting-point of lead-free solder thread is about 40°C higher than that of conventional lead solder thread, the use of the exclusive-use soldering iron is recommended.

(2) NOTE FOR SOLDERING WORK

Since the melting-point of lead-free solder is about 220°C, which is about 40°C higher than that of conventional lead solder, and its soldering capacity is inferior to conventional one, it is apt to keep the soldering iron in contact with the PWB for longer time. This may cause land separation or may exceed the heat-resistive temperature of components. Use enough care to separate the soldering iron from the PWB when completion of soldering is confirmed.

Since lead-free solder includes a greater quantity of tin, the iron tip may corrode easily. Turn ON/OFF the soldering iron power frequently.

If different-kind solder remains on the soldering iron tip, it is melted together with lead-free solder. To avoid this, clean the soldering iron tip after completion of soldering work.

If the soldering iron tip is discolored black during soldering work, clean and file the tip with steel wool or a fine filer.

CAUTION FOR BATTERY REPLACEMENT

(Danish)   ADVARSEL !
Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri
af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandoren.

(English)   Caution !
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type
recommended by the manufacturer.
Dispose of used batteries according to manufacturer's instructions.

(Finnish)   VAROITUS
Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden
mukaisesti.

(French)   ATTENTION
Il y a danger d'explosion s' il y a remplacement incorrect
de la batterie. Remplacer uniquement avec une batterie du
même type ou d'un type équivalent recommandé par
le constructeur.
Mettre au rebut les batteries usagées conformément aux
instructions du fabricant.

(Swedish)   VARNING
Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent
typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt fabrikantens
instruktion.

(German)   Achtung
Explosionsgefahr bei Verwendung inkorrekter Batterien.
Als Ersatzbatterien dürfen nur Batterien vom gleichen Typ oder
vom Hersteller empfohlene Batterien verwendet werden.
Entsorgung der gebrauchten Batterien nur nach den vom
Hersteller angegebenen Anweisungen.

CAUTION FOR BATTERY DISPOSAL

(For USA, CANADA)
"BATTERY DISPOSAL"
THIS PRODUCT CONTAINS A LITHIUM PRIMARY
(MANGANESS DIOXIDE) MEMORY BACK-UP BATTERY
THAT MUST BE DISPOSED OF PROPERLY. REMOVE THE
BATTERY FROM THE PRODUCT AND CONTACT YOUR
LOCAL ENVIRONMENTAL AGENCIES FOR INFORMATION
ON RECYCLING AND DISPOSAL OPTIONS.

"TRAITEMENT DES PILES USAGÉES"
CE PRODUIT CONTIENT UNE PILE DE SAUVEGARDE DE
MÉMOIRE LITHIUM PRIMAIRE (DIOXYDE DE MANGANÈSE)
QUI DOIT ÊTRE TRAITÉE CORRECTEMENT. ENLEVEZ LA
PILE DU PRODUIT ET PRENEZ CONTACT AVEC VOTRE
AGENCE ENVIRONNEMENTALE LOCALE POUR DES
INFORMATIONS SUR LES MÉTHODES DE RECYCLAGE ET
DE TRAITEMENT.

SHARP

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